What is claimed is:

1. A heat exchanger comprising:

a) a corrugated strip, the strip being folded back and forth upon itself to define a stack having a plurality of folds,

b) a plurality of pieces of corrugated material, the pieces being inserted within said plurality of folds, wherein the pieces have corrugations which are non-parallel to corrugations of the strip,

c) a plurality of duct attachments, each duct attachment comprising means for holding the stack together, and for providing fluid access to an interior region of the stack, and

d) a high-temperature sealant disposed on an outside surface of the stack, wherein the sealant is disposed in locations not spanned by said duct attachments.

2. The heat exchanger of Claim 1, wherein the corrugated strip has straight corrugations which are generally parallel to an edge of the strip, and wherein the corrugations of said pieces of corrugated material are generally perpendicular to said straight corrugations of said corrugated strip.

3. The heat exchanger of Claim 1, wherein the stack has first and second sides, and wherein there is a pair of duct attachments on the first side and a pair of duct attachments on the second side.

4. The heat exchanger of Claim 1, wherein the stack has first and second sides, and wherein there is a pair of duct attachments located at two ends of the first side and a pair of duct attachments located at two ends of the second side, and wherein each side also includes a duct attachment located, respectively, between said two ends.

5. The heat exchanger of Claim 1, wherein the sealant comprises a

moldable material that has been allowed to harden.

6. The heat exchanger of Claim 1, wherein the cut pieces are formed from a same material as the corrugated strip.

7. The heat exchanger of Claim 1, wherein the stack includes a plurality of dimples or holes for promoting adhesion of the sealant.

8. The heat exchanger of Claim 1, wherein the sealant has a coefficient of thermal expansion which approximates a coefficient of thermal expansion of materials forming the stack.

9. The heat exchanger of Claim 8, wherein the sealant includes metal particles.

10. A heat exchanger comprising:

a) a corrugated strip, the strip being folded back and forth upon itself to define a stack having a plurality of folds, the stack having two ends,

b) a plurality of pieces of corrugated material, the pieces being inserted within said plurality of folds, wherein the pieces have corrugations which are non-parallel to corrugations of the strip,

c) a plurality of duct attachments affixed to the stack, and

d) a high-temperature sealant disposed on an outside surface of the stack, wherein the sealant is disposed at least at the ends of the stack.

11. The heat exchanger of Claim 10, wherein the corrugations of the strip and the corrugations of the plurality of pieces are generally mutually perpendicular.

12. The heat exchanger of Claim 10, wherein the stack has first and second sides, and wherein there are at least two duct attachments on the first side and at least two duct attachments on the second side.

13. The heat exchanger of Claim 10, wherein the sealant comprises a moldable material that has been allowed to harden.

14. The heat exchanger of Claim 10, wherein the cut pieces are formed from a same material as the corrugated strip.

15. The heat exchanger of Claim 10, wherein the stack includes a plurality of dimples or holes for promoting adhesion of the sealant.

16. The heat exchanger of Claim 10, wherein the sealant has a coefficient of thermal expansion which approximates a coefficient of thermal expansion of materials forming the stack.

17. The heat exchanger of Claim 16, wherein the sealant includes metal particles.

18. A heat exchanger comprising:

a) a corrugated strip, the strip being folded back and forth upon itself to define a stack having a plurality of folds, the stack having first and second sides and two ends,

b) a plurality of pieces of corrugated material, the pieces being inserted within said plurality of folds, wherein the pieces have corrugations which are generally perpendicular to corrugations of the strip,

c) a plurality of duct attachments, each duct attachment comprising means for holding the stack together, and for providing fluid access to an interior region of the stack, wherein there are at least two duct attachments on the first side of the stack, and wherein there are at least two duct attachments on the second side of the stack, and

d) a high-temperature sealant disposed on an outside surface of the stack, wherein the sealant is disposed in locations not spanned by said duct attachments.

19. The heat exchanger of Claim 18, wherein each side includes a pair of duct attachments located near the two ends of the stack, and wherein

each side also includes a duct attachment located near a middle of the stack.

20. The heat exchanger of Claim 18, wherein the sealant comprises a moldable material that has been allowed to harden.

21. The heat exchanger of Claim 18, wherein both the cut pieces and the strip are formed from a same material.

22. The heat exchanger of Claim 18, wherein the stack includes a plurality of dimples or holes for promoting adhesion of the sealant.

23. The heat exchanger of Claim 18, wherein the sealant has a coefficient of thermal expansion which approximates a coefficient of thermal expansion of materials forming the stack.

24. The heat exchanger of Claim 23, wherein the sealant includes metal particles.

25. A heat exchanger comprising a strip of corrugated material which has been folded back and forth upon itself to define a monolith, the monolith having a pair of ends, the ends being sealed by a moldable material that has been allowed to harden.

26. The heat exchanger of Claim 25, wherein the monolith defines a plurality of folds, the heat exchanger further comprising a plurality of cut pieces of corrugated metal, inserted within the folds, the cut pieces having corrugations which are generally perpendicular to corrugations of the strip.

27. The heat exchanger of Claim 25, wherein the ends of the monolith include a plurality of dimples or holes for promoting adhesion of the moldable material.

28. The heat exchanger of Claim 25, wherein the moldable material has a coefficient of thermal expansion which approximates a coefficient of thermal expansion of materials forming the monolith.

29. A heat exchanger comprising:

a) a strip of material that has been folded back and forth upon itself to define a stack, the material having corrugations which define channels for fluid flow, the stack having first and second sides for receiving first and second fluid streams,

b) means for directing fluid flow within the stack such that said first and second fluid streams flow within the stack without commingling and in sufficient proximity to allow heat transfer between the streams, and

c) means for sealing the stack such that fluid cannot flow to or from a region outside the stack except through said directing means.

30. The heat exchanger of Claim 29, wherein the sealing means comprises a moldable material that has been allowed to harden so as to seal the stack.

31. The heat exchanger of Claim 30, wherein the moldable material has a coefficient of thermal expansion which approximates a coefficient of thermal expansion of the stack.

32. A method of making a heat exchanger, comprising:

a) folding a corrugated strip back and forth upon itself to define a plurality of folds,

b) inserting cut pieces of corrugated material within the folds of the corrugated strip, the folded strip and the cut pieces together defining a stack,

c) affixing a plurality of duct attachments to the stack, and

d) applying a sealant to portions of the stack which are not covered by the duct attachments.

33. The method of Claim 32, wherein the stack includes first and second sides and a pair of ends, and wherein step (c) comprises affixing at

least two duct attachments to the first side and at least two duct attachments to the second side.

34. The method of Claim 33, wherein step (d) includes applying the sealant to the ends of the stack, and applying the sealant to portions of the first and second sides which are not covered by the duct attachments.

35. The method of Claim 32, wherein step (d) comprises attaching a moldable material to the stack, and allowing the moldable material to harden so as to seal at least a portion of the stack.

36. The method of Claim 32, further comprising the step of forming dimples or holes in portions of the stack.

37. The method of Claim 32, further comprising selecting a coefficient of thermal expansion of the sealant so as to approximate a coefficient of thermal expansion of the stack.

38. The method of Claim 37, wherein the selecting step includes mixing the sealant with metal particles so as to produce a mixture having a desired coefficient of thermal expansion.

39. A method of making a heat exchanger, comprising folding a corrugated strip back and forth upon itself to define a monolith having a pair of ends, applying a moldable material to the ends of the monolith, and allowing the moldable material to harden so as to form a sealant for the monolith.

40. The method of Claim 39, further comprising applying the moldable material simultaneously at the ends of the monolith.

41. The method of Claim 39, wherein the step of applying the moldable material is performed by a technique selected from the group consisting of thermoplastic injection molding, pressure die casting of metal, and application of a moldable sealant.

42. The method of Claim 39, further comprising selecting the moldable

material to have a coefficient of thermal expansion which approximates a coefficient of thermal expansion of the monolith.

43. The method of Claim 42, wherein the selecting step includes mixing the moldable material with metal particles so as to produce a mixture having a desired coefficient of thermal expansion.